REMARKS

Claims 1-24 are pending. Claims 3, 7 and 10 have been canceled without prejudice to filing a continuing application claiming any canceled subject matter. Claims 11-24 stand withdrawn. Claims 1, 2, 4-6, 8 and 9 stand non-finally rejected.

Claims 1, 2, 5, 6, 8 and 9 have been amended without prejudice to filing a continuing application claiming any deleted subject matter. The claims have been amended to more particularly point out and distinctly claim the subject matter applicants regard as their invention. Support for the amendments is found in the application as originally filed. (See, e.g., pp. 14, lines 1-5). No new matter has been added.

As set forth in the Office Action dated February 5, 2007, applicants acknowledge that the restriction requirement and election with traverse of Group I has been made FINAL.

Applicants further acknowledge the drawings filed on February 27, 2004 have been accepted. Applicants still further acknowledge the examiner's Notice of References Cited and entry of applicants' IDS.

For the foregoing reasons, applicants respectfully request reconsideration and withdrawal of the outstanding rejections and allowance of the application.

Claims 8 and 9 stand rejected under 35 USC § 112, First Paragraph, as being nonenabled. Specifically, the rejection of claim 8 and 9 is a "scope of enablement rejection."

As set forth in MPEP 2164.04,

> [b]efore any analysis of enablement can occur, it is necessary for the examiner to construe the claims. For terms that are not well-known in the art, or for terms that could have more than one meaning, it is necessary that the examiner select the definition that he/she intends to use when examining the application, based on his/her understanding of what applicant intends it to mean, and explicitly set forth the meaning of the term and the scope of the claim when writing an Office action. See *Genentech v. Wellcome Foundation*, 31 USPQ2d 1161, 1167-68 (Fed. Cir. 1994).

In the instant Office Action, the

> Examiner has interpreted claim 8 to read on the absolute prevention of prostate cancer. Support for this interpretation is found in the language of claim 8, which if read in its broadest reasonable interpretation, recites the prevention of prostate cancer (*i.e.*, preventing the occurrence of prostate cancer). (Underline added).

Applicants respectfully submit that the examiner's interpretation of claim 8 is overly broad and unreasonable. No where in applicants' specification are the instantly claimed

methods of preventing occurrence or recurrence of prostate cancer cast as being "absolute." (See, e.g., pp. 7, lines 3-8, pp. 21, lines 9-14 and pp. 23, lines 1-3). Other terms in claim 8, such as "recurrence", "patient", "administering" and "effective amount", are defined in the specification. (See pp. 22, lines 8-9, pp. 22, lines 10-19 and pp. 24, lines 7-18, respectively).

Applicants clearly claim pharmaceutical methods of preventing occurrence/recurrence of prostate cancer by administering an effective amount of the anti-androgen compound to achieve a "therapeutic response." (P. 24, line 9). When read in the context of the whole claim and in view of the specification, one of ordinary skill in the art would not interpret claims 8 and 9 to cover "absolute prevention." One of ordinary skill would clearly interpret claims 8 and 9 to cover pharmaceutical therapeutic methods as those terms are commonly understood in the art.

Once the claimed invention as a whole is properly interpreted, "the examiner has the initial burden to establish a reasonable basis to question the enablement provided for the claimed invention." (MPEP 2164.04, *citing*, *In re Wright*, 27 USPQ.2d 1510, 1513 (Fed. Cir. 1993)("Examiner must provide a reasonable explanation as to why the scope of protection provided by a claim in not adequately enabled by the disclosure.").

To satisfy the initial burden in a scope of enablement rejection, the examiner is to "explain why the specification is not enabling, applying the factors set forth in *In re Wands*, 8 USPQ2d 1400, 1404 (Fed. Cir. 1998) as appropriate." (MPEP 706.03(c) at ¶ 7.31.03, Examiner Note 6). The examiner is to show that "the scope of any enablement provided to one skilled in the art is not commensurate with the scope of protection sought by the claims. (See MPEP 2164.04 Burden on the Examiner Under Enablement Requirement). To satisfy the *prima facie* burden, the examiner makes "specific findings of fact, supported by the evidence, and then drawing conclusions based on these findings of fact." (Id.) ("References should be supplied if possible to support a *prima facie* case of lack of enablement, but are not always required ... [h]owever, specific technical reasons are always required.").

Compact prosecution also provides that "the first Office action on the merits should present the best case with all the relevant reasons, issues, and evidence so that all such rejections can be withdrawn if applicant provides appropriate convincing arguments and/or evidence in rebuttal." (Id.) Compact prosecution also "dictate[s] that if an enablement rejection is appropriate and the examiner recognizes limitations that would render the claims enabled, the examiner should note such limitations to applicant as early in the prosecution as

possible." (Id.) ("In other words, the examiner should always look for enabled, allowable subject matter and communicate to applicant what that subject matter is at the earliest point possible in the prosecution of the application.").

In the instant application, no references or other factual evidence has been cited. The examiner has relied solely upon unsupported assertions. Applicants respectfully traverse such assertions and submit that no *prima facie* case of nonenablement has been established.

One of the *Wands* factors is the breadth of the claims. (MPEP 2164.01(a)). As argued herein, the claims are not overly broad once they are properly interpreted to cover pharmaceutical therapeutic methods. In particular, claim 8 has been amended to recite specific substitutions of the C_1-C_3 alkyl moiety within a Markush group, and claim 9 is directed to a single specie within the genus of claim 8.

Other *Wands* factors are the level of predictability, the amount of direction provided by the inventor, the state of the art, the nature of the invention, the quantity and the existence of working examples, and the quantity of experimentation needed to make or use the invention based on the content of the disclosure. (Id.) Yet another *Wands* factor is the level of one or ordinary skill, which applicants submit is quite high in the prostate oncology art. (Id.)

In the Office Action, it is asserted, without any factual support, that cancer treatment is "somewhat predictable" and "prevention of prostate cancer" is not predictable. (Underline in Office Action). It is also asserted that "no model system is available ... to test any particular compound for its efficacy in [absolutely] preventing prostate cancer" (Id.) The examiner still further asserts that "no specific guidance or direction on how one skilled in the art could absolutely prevent prostate cancer by administering the claimed compounds." (Id.)

Applicants respectfully traverse the examiner's numerous assertions as being unsupported by any factual evidence of record. Applicants further submit that no undue experimentation would be needed respecting the genus structure in claim 8 or the single specie in claim 9 (i.e., "PMCol" or 2,2,5,7,8-pentamethyl-6-chromanol), which are supported by the binding inhibition data shown in Fig. 2 and the results discussion set forth at pp. 41, lines 4-22. With all due respect, applicants respectfully submit that the instant specification provides factual data and guidance as to preventing the occurrence or recurrence of prostate cancer by inhibiting androgen binding.

For the foregoing reasons, applicants respectfully submit that claims 8 and 9 (further in view of the instant specification) fully comply with the enablement requirement of 35 USC § 112, First Paragraph. Reconsideration and withdrawal of the rejections is requested.

In the Office Action, claims 1, 4, 5 and 8 stand rejected under 35 USC § 112, Second Paragraph, as being indefinite. Applicants note that withdrawn claims 10-14 and 16 were improperly listed in the rejection. Applicants do not respond herein to the rejection of withdrawn claims. Applicants request clarification of the status of withdrawn claims 11-24.

Regarding instant claims 1, 4, 5 and 8, the examiner argues that the claims are indefinite because substitution of the C_1-C_3 alkyl group is unclear/unknown. Applicants respectfully traverse that the then-pending language was indefinite. However, to facilitate prosecution, applicants have amended claims 1, 4, 5 and 8 to recite a Markush group as follows:

> a member selected from the group consisting of unsubstituted C_1-C_3 alkyl group, C_1-C_3 alkyl substituted with one or more of halogen, hydroxy, alkoxy carbonyl, nitro, thio and thioalkyl ...

For the foregoing reasons, applicants respectfully submit that instant claims 1, 4, 5 and 8 fully comply with 35 USC § 112, Second Paragraph. Reconsideration and withdrawal of the rejections is respectfully requested.

In the Office Action, claim 1 stands rejected under 35 USC § 102(b) as being anticipated by Gunawardena et al. ("Gunawardena"). It is the examiner's position that then-pending claim 1 "read on α-tocopherol (i.e. wherein R_1 is a 'substituted' C_3 alkyl group)." (Id.) It is also argued that α-tocopherol "did significantly affect the growth of androgen-responsive cell lines". (Id.)(Underline in Office Action). Thus, the reference inherently "teaches that α-tocopherol inhibits the growth of androgen-dependent prostate cancer cells." (Id.)

"Anticipation requires disclosure of each and every claim limitation in a single prior art reference, either explicitly or inherently." (*In re Omeprazole Patent Litigation*, U.S. App. Lexis 9233 (Fed. Cir. 2007), *citing*, *MEHL/Biophile Int'l Corp. v. Milgraum*, 192 F.3d 1362, 1365 (Fed. Cir. 1999)). "An anticipation analysis requires a comparison of the construed claim to the prior art." (Id., *citing*, *Helifix, Ltd. v. Blok-Lok, Ltd.*, 208 F.3d 1339, 1346 (Fed. Cir. 2000)).

Applicants respectfully traverse the argument that the reference inherently anticipated then-pending claim 1. However, to facilitate prosecution, instant claim 1 has been amended to recite a Markush group of substitutions that excludes α-tocopherol.

For the foregoing reasons, applicants respectfully submit that instant claim 1 is patentably novel over Gunawardena et al. Reconsideration and withdrawal of the rejection is requested.

In the Office Action, claims 1, 4, 5 and 8 stand rejected under 35 USC § 102(b) as being anticipated by USPN 6,350,776 to Azzi (the '776 patent). It is argued that the '776 patent teaches treating/inhibiting/preventing prostate cancer "by administering a combination of lycopene and α-tocopherol. (Id.)

Applicants respectfully traverse the argument that the '776 patent literally or inherently anticipated then-pending claims 1, 4, 5 and/or 8. However, to facilitate prosecution, instant claim 1 has been amended to recite a Markush group of substitutions that excludes α-tocopherol.

For the foregoing reasons, applicants respectfully submit that instant claims 1, 4, 5 and 8 are patentably novel over the '776 patent. Reconsideration and withdrawal of the rejection is requested.

In the Office Action, claims 1, 4 and 5 stand rejected under 35 USC § 102(b) as being anticipated by USPN 6,242,479 to Wechter (the '479 patent). It is argued that the '479 patent discloses α-tocopherol, LLU-α and derivatives thereof to treat prostate cancer, which also inherently treat androgen-dependent and androgen-independent prostate cancer. (Id.)

Applicants respectfully traverse the argument that the '479 patent literally or inherently anticipated then-pending claims 1, 4 and/or 5. However, to facilitate prosecution, instant claims 1, 4 and 5 have been amended to recite a Markush group of substitutions that excludes α-tocopherol and the substitutions disclosed at R_6 in the '479 patent. (See col. 6, lines 41-42).

For the foregoing reasons, applicants respectfully submit that instant claims 1, 4 and 5 are patentably novel over the '479 patent. Reconsideration and withdrawal of the rejection is requested.

In the Office Action, claims 1, 4 and 5 stand rejected under 35 USC § 102(b) as being anticipated by Published US Application No. 2001/0031782 to Wechter (the '782 reference), which is a related continuation of the '479 patent. It is argued that the '782 reference

discloses α-tocopherol, LLU-α and derivatives thereof to treat prostate cancer and inherently treat androgen-dependent and androgen-independent prostate cancer. (Id.)

Applicants respectfully traverse the argument that the '782 reference literally or inherently anticipated then-pending claims 1, 4 and/or 5. However, to facilitate prosecution, instant claims 1, 4 and 5 have been amended to recite a Markush group of substitutions that excludes α-tocopherol and the substitutions disclosed at R_6 in the '479 patent. (See col. 6, lines 41-42).

For the foregoing reasons, applicants respectfully submit that instant claims 1, 4 and 5 are patentably novel over the '782 reference. Reconsideration and withdrawal of the rejection is requested.

In the Office Action, claims 1, 2 and 4-6 stand rejected under 35 USC § 103(a) as being obvious over Gunawardena in view of Sheu et al. ("Sheu"). It is argued that Sheu teaches using 2,2,5,7,8-pentamethyl-6-hydroxychromane (i.e., PMCol which is the compound shown in instant claims 2 and 6), known as a potent antioxidant, for inhibiting human platlet aggregation. (Id.) It is conceded that Sheu fails to disclose using PMCol to inhibit growth of androgen-dependent tumor cells or to delay progression of prostate cancer. (Id.)

Method of use claims 2 and 6 have been amended to cover using PMCol and pharmaceutically acceptable salts "for inhibiting growth of androgen-dependent tumor cells" (claim 2) and for "delaying progression of prostate cancer" (claim 6). Method of use claims 1, 4 and 5 have been amended to cover using a genus of compounds (whereby the genus excludes α-tocopherol) for "inhibiting the growth of androgen-dependent tumor cells" (claims 1 and 4) and for "delaying the progression of prostate cancer" (claim 5).

In an attempt to establish a *prima facie* case of obviousness, the examiner cites to applicants own specification for the proposition that "anti-androgenic activity of chromanol-derived moiety is ... a newly discovered property" unpatentable under *Atlas Powder Co. v. Ireco, Inc.*, 51 USPQ.2d 1943, 1947 (Fed. Cir. 1999) and *In re Best*, 195 USPQ 430, 433 (CCPA 1977). It is improper to use applicants' own specification in this manner. (*In re Lee*, 61 USPQ 1430 (Fed. Cir. 2002), *citing*, *W.L. Gore v. Garlock, Inc.*, 220 USPQ 303, 312-313 (Fed. Cir. 1983)). Using applicants' disclosure as a blueprint to reconstruct the claimed invention from isolated pieces of the prior art violates 35 USC § 103 that requires obviousness when the invention was made. (See *Grain Processing Corp. v. American Maize-Prods. Co.*, 5 USPQ.2d 1788, 1792 (Fed. Cir. 1988).

Sheu essentially teaches that PMCol is "6-times more potent than α-tocopherol" on platelet aggregation and antioxidative activity. (Summary at pp. 197). Sheu is silent with respect to other therapeutic indications, such as cancer, prostate cancer, or any sort of androgenic activity.

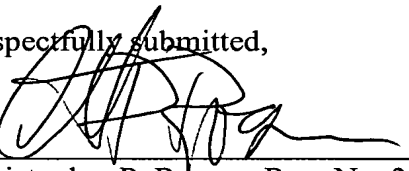
Gunawardena teaches that α-tocopherol "was less potent in modifying prostate cancer cell growth than the antioxidants PDTC and DETC." (Pp. 292, first col.). The reference also suggests that α-tocopherol "did not cause growth inhibition in the androgen-unresponsive DU-145 cell line, whereas it did significantly affect growth of the androgen-responsive cell lines." (Id.)

In the Office Action, it is argued that one of ordinary skill would have been motivated by Sheu to modify the α-tocopherol in Gunawardena by cleaving off the lipophilic phytyl chain leaving the "chromanol-derived vitamin E compounds to inhibit prostate cancer cells." (Id.) However, the references simply fail to explicitly provide even a hint of any such motivation. Applicants also fail to recognize any implicit rationale for the proffered modification based (at least in part) on explicit teachings in the references.

For the foregoing reasons, applicants respectfully submit that instant claims 1, 2 and 4-6 are patentably nonobvious over Sheu and/or Gunawardena. Reconsideration and withdrawal of the rejections is requested.

The Commissioner is authorized to charge any fees under 37 CRF § 1.17 that may be due on this application to Deposit Account 17-0055. The Commissioner is also authorized to treat this amendment and any future reply in this matter requiring a petition for an extension of time as incorporating a petition for extension of time for the appropriate length of time as provided by 37 CFR § 136(a)(3).

Respectfully submitted,



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